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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,142	08/15/2001	Richard Edwin Harper	YOR920010068US1	8914
48150	7590	08/02/2005		
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER MCCARTHY, CHRISTOPHER S	
			ART UNIT	PAPER NUMBER
			2113	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,142

Applicant(s)

HARPER ET AL.

Examiner

Christopher S. McCarthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-30 is/are allowed.
- 6) ☒ Claim(s) 1-19, 31-35, 37 and 38 is/are rejected.
- 7) ☒ Claim(s) 36 and 39-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: response to arguments.

DETAILED ACTION

1. Claims 1-19, 31-35, 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chefalas et al. U.S. Patent Application Publication US2002/0138786, as cited in prior office action, which was mailed on 3/8/2005.
2. Claims 36, 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claims 20-30 are allowed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-19, 31-35, 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chefalas et al. U.S. Patent Application Publication US2002/0138786.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

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102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Chefalas teaches a method of reducing warranty costs, comprising: monitoring indicators in a computer system; and, discriminating, by said computer, between a hardware-induced problem or outage and a software-induced problem or outage in the computer system based on said indicators; and periodically storing said indicators prior to the problem or outage (0035,0036; figure 4).

As per claim 2, Chefalas teaches the method of claim 1, wherein said indicators comprise indicators of system software and hardware health (0035, 0036)

As per claim 3, Chefalas teaches the method of claim 2, further comprising: analyzing said indicators to determine whether the problem or outage was due to hardware or software, after the problem or outage occurs (0036).

As per claim 4, Chefalas teaches the method of claim 3, further comprising: presenting information regarding a cause of the problem or outage to a user of the computer system to prevent an unnecessary service call and hardware replacement (0036, 0031).

As per claim 5, Chefalas teaches the method of claim 1, further comprising: depending upon said determining of said hardware-induced problem or outage or said software-induced problem or outage, determining a manufacturer of said hardware or said software having undergone said problem or said outage (0036,0024,0004).

As per claim 6, Chefalas teaches the method of claim 1, wherein, in event of one of a hardware-induced problem or outage and software-induced problem or outage, pre-outage data is stored in a log file across the outage (0036), wherein, an event is interpreted to encompass a possible outage of a device.

As per claim 7, Chefalas teaches a method of reducing warranty costs associated with a computer system, comprising: monitoring indicators in a computer system; and, detecting a lack of performance of said computer system; discriminating, by said computer, whether said lack of performance was caused by a hardware-induced problem or a software-induced problem or outage based on said indicators; and periodically storing said indicators prior to the problem or outage (0035, 0036), wherein, lack of performance is inherent in the failure of an object in the system.

As per claim 8, Chefalas teaches the method of claim 7, further comprising: gathering pre-lack of performance data, said discriminating being performed based on said pre-lack of performance data (0036).

As per claim 9, Chefalas teaches the method of claim 7, further comprising: recovering from said lack of performance (0012).

As per claim 10, Chefalas teaches the method of claim 8, wherein said lack of performance comprises an outage, and in event of one of said hardware-induced problem or outage and said software-induced problem or outage, said pre-outage data is stored across the outage (0036).

As per claim 11, Chefalas teaches a method of reducing warranty costs, comprising: monitoring indicators in a computer system; and, discriminating, by said computer, between a

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hardware-induced problem or outage and a software-induced problem or outage in said computer system based on said indicators; periodically storing said indicators prior to the problem or outage (0035, 0036); and based on said discriminating, reducing a duration of a service call and ensuring that a service technician has a correct part on hand at a time of repair (0035,0036,0004,0032).

As per claim 12, Chefalas teaches the method of claim 11, wherein said indicators comprise indicators of system software and hardware health (0036).

As per claim 13, Chefalas teaches the method of claim 12, further comprising: after the problem or outage, analyzing the indicators to determine whether the problem or outage was due to hardware-induced problem or outage or said software-induced problem or outage and which hardware or software subsystem was most likely a cause of the outage, and to produce information (0036).

As per claim 14, Chefalas teaches the method of claim 13, further comprising: presenting the information to a service technician of a computer system to replace or repair a faulty subsystem (0032,0004,0031).

As per claim 15, Chefalas teaches a method of reducing a trouble-shooting cost in a computer system, comprising: sampling system health data from a plurality of sources, and storing said data in a log; determining whether said outage event has occurred; and based on whether said outage event occurs, analyzing, by said computer, logged and other data to judge a likely cause of the event (0036).

As per claim 16, Chefalas teaches the method of claim 15, further comprising if the outage event comprises a software outage or problem, determining whether automatic recovery

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is possible, and if so, invoking an automatic recovery mechanism and notifying a customer or field support personnel that said software outage or problem is the cause of the event, and identifying a faulty subsystem for subsequent troubleshooting (0035,0031,0034).

As per claim 17, Chefalas teaches the method of claim 15, further comprising if the outage event comprises a software outage or problem, determining whether automatic recovery is possible, and if not, indicating that the event is due to said software outage or problem, and is not automatically recoverable, and notifying a customer or service technician to manually recover the fault (0035,0031,0034,0030).

As per claim 18, Chefalas teaches the method of claim 15, further comprising: determining whether the event comprises a software outage or problem and if not, determining whether a diagnosable hardware outage or problem exists (0035,0036).

As per claim 19, Chefalas teaches the method of claim 18, further comprising: if the event is judged to be caused by hardware, examining at least one of a hardware error log, an error register, and a hardware diagnostic, and attempting to localize a replaceable component that caused the event; informing a customer or a service technician that the outage was due to hardware; and manually recovering the hardware by replacing only defective hardware (0035,0031,0004).

As per claim 31, Chefalas teaches a computer-readable medium tangibly embodying a program of computer-readable instructions executable by a digital processing apparatus to perform a method for reducing warranty costs, said method comprising: monitoring indicators in a computer system; and, discriminating, by said computer, between a hardware-induced problem or outage and a software-induced problem or outage in a computer system based on said

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indicators (0036,0035), wherein, a memory is inherent in the system in that is capable of storing an event log and a monitoring program; and periodically storing said indicators prior to the problem or outage (0035, 0036)..

As per claim 32, Chefalas teaches the method according to claim 1, wherein said indicators comprise indicators of said software health comprising at least one of resource consumption data, system and application error logs, system utilization and preference data, and software error accounts (0036).

As per claim 33, Chefalas teaches the method according to claim 1, wherein said indicators comprise indicators of said hardware health comprising at least one of concurrent diagnostics, hardware error logs, and hardware error counts (0035).

As per claim 34, Chefalas teaches the method according to claim 1, further comprising: continuously monitoring and storing indicators of system software health and hardware health after said problem or outage (0036), wherein the error log is continuously updated since the last error update process.

As per claim 35, Chefalas teaches the method according to claim 34, wherein said indicators monitored after said problem or outage comprise at least one of error logs, crash dumps or memory, error codes, offline or power-on hardware diagnostics and hardware error registers (0036).

As per claim 37, Chefalas teaches the method according to claim 1, wherein another execution environment is used to perform said monitoring (0012).

As per claim 38, Chefalas teaches the method according to claim 1, wherein said monitoring indicators in said computer system comprises monitoring said indicators prior to said

problem or outage (0035, 0036), wherein the continuous error log of the system monitors the component and updates itself since the last error process update.

Allowable Subject Matter

5. Claims 20-30 are allowed.
6. Claims 36, 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 6/8/2005 have been fully considered but they are not persuasive.

The applicant has argued and has amended the claim to cite language of “discriminating, by said computer” as a means to overcome the Chefalas reference. The examiner respectfully disagrees. In paragraph 0035 of Chefalas, he teaches the sending of the software agent to the actual computing device to facilitate the inventive process. The computer system is the device utilizing the agent and, therefore, is the discriminating device.

Furthermore, the applicant argues that Chefalas does not teach or suggest the discriminating between hardware and software problems. The examiner respectfully disagrees. In figure 4, the computer system/software agent separately polls and queries the components of the computer system. In steps 402-404, the agent queries for all hardware problems. In step 412, the agent scans event logs to find errors recorded in the logs. It is the contention of the

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examiner that the process of separately polling hardware for problems and polling software for problems implicitly teaches the distinction between the two.

The applicant also argues that Chefalas does not cite automatic recovery without user intervention, as in claims 16-17. The examiner contends that this exclusion of user intervention is not in claim language of claims 16-17. The examiner also contends that Chefalas does send an automated solution to the user to recover from a problem, without the user having to manually fix the problem other than pushing a button. Therefore, the automatic recovery mechanism is invoked, as is cited in claim language, even if the recovery is not carried through automatically.

Furthermore, the applicant argues that Chefalas does not teach “indicators of said software health comprising at least one of resource consumption data, system and application error logs, system utilization and preference data, and software error accounts.” The examiner respectfully disagrees. The claim language cites the necessity of an indicator as only one of the list. The examiner contends that Chefalas uses software event logs to discover an error in the log pertaining to the software program. Therefore, the event log serves as an error log of the system and application. This argument is also relevant to the applicant’s argument per claim 35.

The applicant also argues Chefalas does not teach “continuously monitoring and storing indicators...” The examiner respectfully disagrees. As stated in prior office action, argued in claim 34, the computer system constantly updates its event logs and the error events therein on the computer system.

In light of the above arguments, all applicable rejected claims stand.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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csm

July 26, 2005


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